

Application No.: 10/021161

Case No.: 56304US002

REMARKS

Claims 23-42 are pending. Applicant has amended claim 23 to further clarify that the channels extend through the polishing and backing layers and the line of sight extends through the abrasive article. Claims 23 and 29 have also been amended to correct typographical errors. Support for the amendment can be found in the specification, for example, at page 3, lines 21-22, and in Fig. 7 and its accompanying description beginning on page 17, line 25.

The Patent Office's "broadest reasonable interpretation" of the previously amended claims did not require that the abrasive article have a "through hole." This broad claim interpretation formed the basis for the Patent Office's rejections. Although Applicant does not necessarily agree with the Office Action's claim interpretation, Applicant has amended claim 23 to make clear that the abrasive article has a "through hole." No change in claim scope is intended. Applicant respectfully submits that the amendment places the application in condition for allowance or better form for appeal.

I. Claims 23-27 are Novel over Pieper

Claims 23-27 stand rejected under 35 USC § 102(b) as allegedly being anticipated by Pieper et al. (U.S. Pat. No. 5,152,917). Applicant respectfully requests reconsideration of this rejection because Pieper does not describe, teach, or suggest an abrasive article having a "backing comprising a second channel extending therethrough" nor "a line of sight extending through the abrasive article" as recited in Applicant's claims.

Applicant discloses an abrasive article suitable for the deposition and mechanical polishing of a conductive material. As shown in Fig. 7, the abrasive article has coextensive channels extending through the layers, creating a line of sight extending through the abrasive article. In an ECMD process, for the example, the orientation of the channels allows a plating solution to flow through abrasive article for deposition onto the surface of the workpiece (see, e.g., page 20, lines 3-7).

Significantly, Pieper does not report channels extending through the backing. As acknowledged in the Office Action at paragraph 5, the backing disclosed by Pieper is "completely solid (no openings)". Because it has a solid backing, Pieper does not have a

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“backing comprising a second channel extending therethrough” nor “a line of sight extending through the abrasive article” as recited in Applicant’s claims. Accordingly, the rejection of claims 23-27 under 35 USC § 102(b) as allegedly being anticipated by Pieper should be withdrawn.

II. Claims 23-42 are Not Obvious

A. Claims 23-33 and 36-40 are Not Obvious in view of Rutherford and Pieper

Claims 23-33 and 36-40 stand rejected under 35 USC § 103(a) as allegedly being obvious over Rutherford et al. (U.S. Pat. No. 5,692,950) in view of Pieper. Applicant respectfully requests reconsideration of this rejection because neither Rutherford nor Pieper teach or suggest an abrasive article having “a line of sight extending through the abrasive article” as recited in Applicant’s claims.

As discussed above, Pieper fails to teach or suggest an abrasive article having a line of sight extending through the abrasive article. The Patent Office acknowledges that Rutherford fails to disclose a first channel in the polishing layer with a corresponding channel in the backing. Absent channels or apertures in the abrasive article, it is unclear how Rutherford discloses a line of sight extending through the abrasive article. Thus, Rutherford fails to correct the deficiency in Pieper and all elements of the rejected claims are not disclosed or suggested in the combination of Pieper and Rutherford.

For at least this reason, claim 23 is patentable over Rutherford in view of Pieper. Claims 24-33 and 36-40 each depend directly or indirectly from claim 23. Thus, claims 24-33 and 36-40 are likewise patentable over Rutherford in view of Pieper. Accordingly, the rejection of claims 23-33 under 35 USC § 103(a) as allegedly being obvious over Rutherford in view of Pieper should be withdrawn.

B. Claims 34, 35, 41, and 42 are Not Obvious in view of Rutherford, Pieper, and Barber

Claims 23-33 and 36-40 stand rejected under 35 USC § 103(a) as allegedly being obvious over Rutherford in view of Pieper and further in view of Barber, Jr. (U.S. Pat. No. 6,179,887). Applicant respectfully requests reconsideration of this rejection because there is no motivation to

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combine the mounting holes disclosed in Barber with the abrasive articles disclosed in Pieper or Rutherford.

As discussed above, Pieper and Rutherford fail to teach or suggest an abrasive article having a line of sight extending through the abrasive article. The Patent Office asserts that it would have been obvious to one of ordinary skill in the art to add the mounting holes disclosed by Barber to the grooves disclosed by Rutherford. The Patent Office's proffered motivation for combining Barber and Rutherford was to allow the abrasive article of Rutherford to be mounted. However, if fastening hardware were placed in the mounting holes, the line of sight recited in Applicant's claims would be occluded by the fastening hardware. As discussed above, Applicant has amended claim 23 to further clarify that the line of sight extends through the abrasive article. Alternatively, if fastening hardware was not used, it would defeat both the purpose of the holes in Barber and the Patent Office's proffered motivation to combine the references. Thus, either the combination of references fails to teach or suggest all of the elements of Applicant's claims (i.e. a line of sight extending through the abrasive article), or the claimed combination would render the Barber reference inoperable for its intended purpose. In either case, the Patent Office has failed to meet its burden for establishing a *prima facie* case of obviousness.

For at least this reason, claims 34, 35, 41, and 42 are patentable over Pieper in view of Rutherford and further in view of Barber. Accordingly, the rejection of claims 23-33 under 35 USC § 103(a) for alleged obviousness over Rutherford in view of Pieper and further in view of Barber should be withdrawn.

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III. Conclusion

In view of the above, it is submitted that the application is in condition for allowance. Reconsideration of the application is requested. The Examiner is invited to contact Applicant's undersigned representative with any questions concerning this application.

Respectfully submitted,

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Date

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